



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054760 A3

(51) International Patent Classification: **B24C 7/00**

(21) International Application Number:
PCT/US2004/033158

(22) International Filing Date: 8 October 2004 (08.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/509,875 9 October 2003 (09.10.2003) US

(71) Applicant (for all designated States except US): WASTE
MINIMIZATION AND CONTAINMENT INC.
[US/US]; 2140 Scranton Road, Cleveland, OH 44113
(US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BECKER, James, R.
[US/US]; 6272 Mills Creek Lane, North Ridgeville, OH
44139 (US).

(74) Agent: MOY, Phillip, J., Jr.; Fay, Sharpe, Fagan, Minnich
& McKee, LLP, 1100 Superior Avenue, 7th Floor, Cleve-
land, OH 44114 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

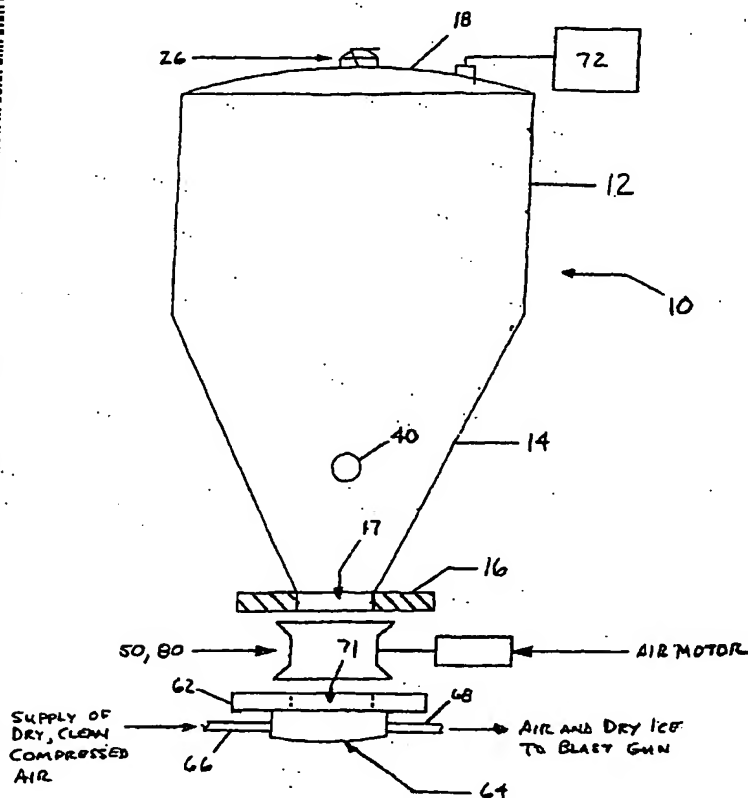
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: DRY ICE FEEDING APPARATUS AND METHOD



(57) Abstract: A dry ice feeding apparatus comprises a hopper (10) adapted to store a supply of dry ice pieces. The hopper (10) has a substantially cylindrical upper portion (12), a frusto-conical lower portion (14) depending downwardly from the upper portion, and a head portion (18) disposed atop the upper portion. The hopper also has an upper opening (20) in the head portion to provide access for loading dry ice pellets into the hopper and a lower opening (17) at the bottom of lower portion. A lid (26) adapted to cover the upper opening of the hopper includes an O-ring (30) providing a fluid seal between the lid and the hopper's upper opening. A mixing chamber (64) is disposed beneath the lower opening of the hopper.

WO 2005/054760 A3



(88) Date of publication of the International search report:
30 March 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.